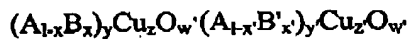


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IN THE CLAIMS:

1.-5. (Cancelled)

6. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

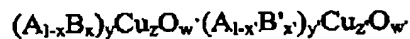
A is one rare earth element and

B and B' are two or more alkaline earth elements,

wherein the superconducting ceramic has the stoichiometric formula $YbBaSrCu_3O_{6.8}$.

7. (Cancelled)

8. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

A is one rare earth element and

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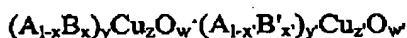
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B and B' are two or more alkaline earth elements,

wherein the superconducting ceramic has the stoichiometric formula $\text{YbBa}_{0.7}\text{Sr}_{0.6}\text{Ca}_{0.6}\text{Cu}_3\text{O}_{6.8}$.

9. (Cancelled)

10. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

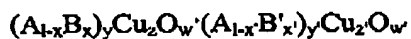
$$w' = 6.0-8.0,$$

A is more than one rare earth element and

B and B' are two or more alkaline earth elements,

wherein the superconducting ceramic has the stoichiometric formula $\text{Y}_{0.5}\text{Yb}_{0.5}\text{BaSrCu}_3\text{O}_{6.8}$.

11. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

A is more than one rare earth element and

B and B' are two or more alkaline earth elements,

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wherein the superconducting ceramic has the stoichiometric formula $Y_{0.5}Yb_{0.5}BaCaCu_3O_{6.8}$.

12. - 17. (Cancelled)

18. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0 < p < 1$$

$$y = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$w = 6.0-8.0,$$

A and A' are different rare earth elements and

B is an alkaline earth element,

wherein the superconducting ceramic has the stoichiometric formula $Y_{0.5}Gd_{0.5}Ba_2Cu_3O_{6.8}$.

19. (Previously presented) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0 < p < 1$$

$$y = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$w = 6.0-8.0,$$

A and A' are different rare earth elements and

B is an alkaline earth element,

wherein the superconducting ceramic has the stoichiometric formula $Y_{0.5}Yb_{0.5}Ba_2Cu_3O_{6.8}$.

20. (Previously Presented) A method for producing a superconducting ceramic according to claim 18, which comprises mixing together stoichiometric amounts of the oxides and/or carbonates of the constituent metals, in powder form, compressing the mixture to a shape and sintering the mixture at an elevated temperature.

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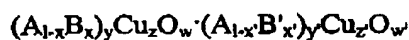
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21. (Cancelled)

22. (Previously Presented) A method for producing a superconducting ceramic according to claim 19, which comprises mixing together stoichiometric amounts of the oxides and/or carbonates of the constituent metals, in powder form, compressing the mixture to a shape and sintering the mixture at an elevated temperature.

23. - 38. (Cancelled)

39. (New) A superconducting ceramic of the general formula

in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

wherein A includes Yb,

B includes Ba and

B' includes Sr.

40. (New) A superconducting ceramic of the general formula $(A_{1-x}B_x)_yCu_zO_w(A_{1-x'}B'_{x'})_yCu_zO_{w'}$

in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

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$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

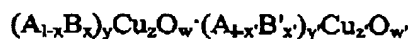
$$w' = 6.0-8.0,$$

wherein A includes Yb,

B includes Ba and

B' includes Sr and Ca.

41. (New) A superconducting ceramic of the general formula

in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

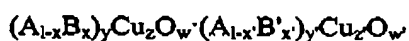
$$w' = 6.0-8.0,$$

wherein A includes Y and Yb,

B includes Ba and

B' includes Sr.

42. (New) A superconducting ceramic of the general formula

in which $0.1 \leq x < 1$

$$0.1 \leq x' < 1$$

$$y = 2.5-3.5,$$

$$y' = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$z' = 1.5-3.5,$$

$$w = 6.0-8.0,$$

$$w' = 6.0-8.0,$$

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wherein A includes Y and Yb,

B includes Ba and

B' includes Ca.

43. (New) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0 < p < 1$$

$$y = 2.5-3.5,$$

$$z = 1.5-3.5,$$

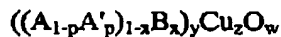
$$w = 6.0-8.0,$$

wherein A includes Y,

A' includes Gd and

B includes Ba.

44. (New) A superconducting ceramic of the general formula



in which $0.1 \leq x < 1$

$$0 < p < 1$$

$$y = 2.5-3.5,$$

$$z = 1.5-3.5,$$

$$w = 6.0-8.0,$$

wherein A includes Y,

A' includes Yb and

B includes Ba.

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